An

Inaugural Dissertation

on

Hepatitis

for the

Degree of Doctor of Medicine

in the

University of Pennsylvania

by

Samuel Murphey

of

Delaware.

Passed March 4. 1829

January 1829

There is, perhaps, no part of the human frame more liable to disease than the liver; and indeed when we contemplate the peculiarity of its structure, the many bloodvessels with which it is supplied, and the importance of the natural secretions of this organ in the promotion of health, it is not a matter of astonishment, that so many, and more particularly those who are exposed to the oppressive heat of a warm climate are subjects of this liver complaint. Dr. Faithorn in his treatise on liver complaints says, "so general indeed is the prevalence of liver complaints, that I am fully satisfied that this organ is the chief seat of most of those ailments unattended by febrile action; and I venture to affirm, that the grand source

of health and disease, is connected with the natural or disordered function of the liver; and that every chronic or lingering illness arises in a considerable degree, from some defect there".

It would be beyond my limits, and also unnecessary for me to enter minutely into the history of this disease, or to offer any speculative notions respecting its pathology. I shall therefore merely point out some of the alleged causes, the symptoms, and mode of treatment of the two forms of this disease, namely, Acute and Chronic, "the former showing the essential character of genuine inflammation; the latter exhibiting symptoms of less violence as to their inflammatory tendency, but an enlargement and hardness of the liver, with an obtuse pain".

The caseses producing this disease besides those producing inflammation elsewhere,

ue transitions from heat to cold; violent exercise; long continued intermittent and remittent fevers; intense summer heat; the intemperate use of spirituous liquors; high living; and derangement of the digestive system. Dr. Thomas says, "in five cases out of six, the exciting cause ~~will~~ of acute hepatitis will be found to be the partial application of ~~heat~~ cold or wet when the body is heated or over fatigued by violent exercise."

Acute hepatitis commences with chilliness preceeding, heat; tightness and pain in the right hypochondriac region extending up to the shoulders, generally most severe in the right, which is much increased by pressure and is accompanied with a cough especially when the pain is severe; oppression of breathing; an uneasiness and difficulty of lying except on the right

side, accompanied with nausea, and sometimes vomiting of bilious matter. The bowels are frequently costive, and the stools when discharged are of a clay colour; the appetite fails; and there is great thirst with a strong, quick and hard pulse. The skin is hot and dry, and after the disease has continued for some length of time it becomes tinged with yellow. The tongue is covered with a white or yellowish fur, and the urine is scanty and high coloured.

In the treatment of Acute Hepatitis the first thing to be attended to is to subdue the inflammatory action of the system. For this purpose the antiphlogistic regimen should be strictly enforced. Blood should be taken from the system freely. After general bleeding, it will be necessary to have recourse to topical, either with cups and scarificator or with leeches; but it will sometimes be necessary

to draw blood a second or third ~~time~~ time from the system this, though, must depend on the circumstances of the individual case. So long, however, as the symptoms, which originally called for the lancet, continue, so long will it be necessary to recur to venesection.

After general and topical bleeding, have been carried to a sufficient extent, and the pain does not subside, great benefit may be derived from the application of a blister over the region of the liver. At the same time the bowels should be thoroughly evacuated by giving an active cathartic, such as a combination of Calomel and Jalap, and afterwards, promoting its operation with some of the neutral salts, or with an infusion of senna ~~and~~ with salts. Faithhorn says, "most particular attention must be paid to the bowels, and every discharge

from them most carefully and accurately surveyed, as it will furnish to the vigilant practitioner information of the highest import, and will convey to him the unerring intelligence of truth, as it regards the character of the secretions." Particular attention should be paid to the diet; it should consist principally of gruels, carefully avoiding animal food and all kinds of stimulating drinks. The thirst should be assuaged by cooling drinks impregnated with acid. The bowels should be kept in a soluble condition, or gently purged by the exhibition of neutral salts or by Calomel in small doses.

It is the practice of some Physicians to commence with mercury in the early stage of this disease; but this practice is not generally adopted. Dr. Lind observes, "when by bleeding, the fever is somewhat abated, and

a gentle purge or clyster has been administered, immediate recourse must be had to mercury, as a specific of this disease." Dr. Bogue states, "a salivation generally cured the diseases of the liver if the spitting was brought on before matter was formed." Though this is the practice of treating diseases of the liver in India, yet it is seldom necessary to produce a salivation in the acute Hepatitis which is common to the United States.

It sometimes happens, either from medical aid not being obtained in due time, or from the violence of the attack, that suppuration is inevitable. When this happens we must endeavour to promote the formation of healthy pus, by directing the patient to take the bark of Cinchona and a nutritive diet with the moderate use of wine. Advantage may also be derived from the application of a large emolient poultice to

the part affected. When the tumour becomes pointed and fluctuation perceptible, it should be opened. This may be done by first laying open the integuments with a scalpel, and afterwards opening the abscess with a lancet or trocar. The matter having been gradually discharged, the wound should be kept clean and frequently dressed with some simple dressing. Should the lips of the wound be inclined to heal too soon, a small tent of lint, smeared with ointment, or dipped in sweet oil, to prevent irritation, should be introduced between them.

This is the practice of treating Acute Hepatitis generally; though suppuration of the liver is a very rare occurrence, especially in this Country.

Having thus given the principal symptoms and the general treatment of Acute

Hepatitis, I pass on to the consideration of the chronic form of this disease. This form of the disease is of much more frequent occurrence than the Acute; and it is a disease which we shall have to combat as often as almost any other. There is scarcely a chronic affection of the abdominal viscera with which the liver is not materially concerned. Hence it becomes the duty of practitioners to be particularly careful in such cases, to observe the state of the liver, and that its functions are properly performed.

The symptoms of Chronic Hepatitis appear frequently of so insignificant a nature, that they occasion but little alarm, ~~until they have~~ and are sometimes entirely overlooked, until they have become so completely fixed, that it requires weeks and even months before they can be eradicated. For a time

the patient feels nothing more than a sense of fullness after meals, accompanied with drowsiness, flatulence, languor, and costiveness; showing, evidently, a defect in the digestive apparatus.

The symptoms, however, gradually increase; the complexion loses its healthy appearance; the skin and eyes become tinged with yellow; the stools are clay coloured; the urine varies both in quantity and consistance, sometimes scanty and high coloured, at other times abundant and pellucid; the sleep is unrefreshing, the patient being disturbed with frightful dreams and fearful apprehensions; the mind becomes depressed and irritable from the slightest causes; the stomach becomes disturbed and uneasy, so much so that it is sometimes supposed to be the seat of the disease; the

tongue is furred, with a nauseous bitter taste in the mouth. The liver becomes enlarged with an obtuse pain, and an uneasy, heavy, sensation is felt in both sides and shoulders, as though a weight were hanging from them or a bandage were bound around the shoulders. There is headach accompanied with a tightness and fulness of the head. The pulse is generally depressed; the skin is dry and harsh, with a considerable degree of heat in the palms of the hands and soles of the feet; though sometimes a profuse perspiration burst out suddenly. The appetite varies, sometimes depraved, but often voracious; sometimes a slight diarrhea comes on which is followed by an alleviation of all the symptoms for a short time. When the complaint has continued for a considerable lenth of time, the patient becomes emaciated particularly the face.

the sy
, wi
this u
that
agree
ometi
e pe
them
ain
ory.
the o
rent
nect
nd
that
ibs.
D
rent
" th

the symtoms here pointed out, taken collectively, will mostly be sufficient to distinguish this disease; but it should be borne in mind, that they differ very much in number and degree according to the severity of the attack. Sometimes they are so slight as scarcely to be perceptible, and at other times, some of them do not really exist. When there is pain and the symptoms are not satisfactory "an experienced touch will discover the obstruction, the tenderness and enlargement of the liver." In this examination it is directed that the patient inspire freely, and the abdominal muscles be relaxed, so that its edge may be forced below the ribs.

Dr. Faithhorn has divided the treatment of Chronic Hepatitis into two stages.

"1. That of a simple derangement of the

hepatic functions; and

2. An actual change in the organization of this gland.

As the symptoms of these two stages of the disease are very unsatisfactory, and the treatment nearly the same, I shall content myself with giving the general treatment, as recommended by different authors.

Dr. Thomas says, "general bleeding is never necessary in Chronic Hepatitis;" whilst Dr. Chapman observes, "in conducting a patient throug' a salivation in this disease it will be proper to introduce mercury gradually, and in order to mitigate pain and subdue febrile action, which will occasionally arise, we shall have to recur in some instances, very frequently, to venesection and blisters." Dr. Faithhorn also recommends general bleeding in some instances. This is sufficient to show how vain it would be for

me to point out any particular treatment, when men, of such extensive knowledge and ample experience, so widely differ. But as it is a privilege, I must say that the lancet in some cases is our best remedy, and indeed indispensable. The bowels should in every case be evacuated, and the vitiated matter with which they are lined be purged off. For this purpose active deobstruant medicines are to be used; the best perhaps is Calomel and Aloes or Gambouge combined, or a decoction of Senna with Epsom salts.

After the bowels have been well cleaned, Mercury is indispensably necessary. This is a remedy which has been employed in Chronic Hepatitis ever since its properties as a medicine have been known, and without it Hepatitis would be a truly alarming disease. It is objected by Dr Faithhorn that this medicine is

useful p
tions of
gets ori
through
cannot
consider
to other
separate
angere
commo
mer
ectur
Th
alm
objec
use s
Thom
uses a
waste

useful in the simple derangement of the functions of the liver; yet in the actual change of its organization, he speaks thus, "Mercury though partly objected to in the former stage, cannot be dispensed with here, and may be considered the sine qua non". Dr Chapman says, "all other modes of treatment, in confirmed Hepatitis, are only feeble temporizings and dangerous tampernings. Dr Thomas says, "the common plan of cure in Chronic Hepatitis is by mercury, and it is certainly the most effectual practice".

Though mercury is given and recommended by almost every practitioner, yet it is a subject of controversy, to what extent its use should be carried. It is remarked by Dr Thomas that, "it should be given in small doses and slowly, so as to keep up a brassy taste in the mouth for a considerable

time",
his co
lima
expe
The
given
with
comb
the a
labo
ases
said
The
ende
ent
le
supp
d to

time", which is the popular treatment in this country, though it is used in warmer climates much sooner, and carried to a greater extent, than is recommended here.

The form in which mercury is generally given is that of Calomel in small doses, with which it is sometimes necessary to combine Opium to allay irritation.

Mercury has been objected to where the disease attacks persons of a scorbutic habit as being highly improper. In such cases Nitric acid diluted with water is said to be very advantageously given.

The diet allowed to persons labouring under Chronic Hepatitis should be of a nutritive nature, though of light digestible substances. The vegetable kingdom supplies a number of articles well adapted to this disease. Among the animal sub-

stances the best are eggs, oysters, mutton, and beef; but these should be used with care, and not taken in a large quantity at a time.